

V&V Reference Report

L2 ASCDS Version : 7.6.7.1

Observation 5362 - L2 Version 001
Chandra X-Ray Center

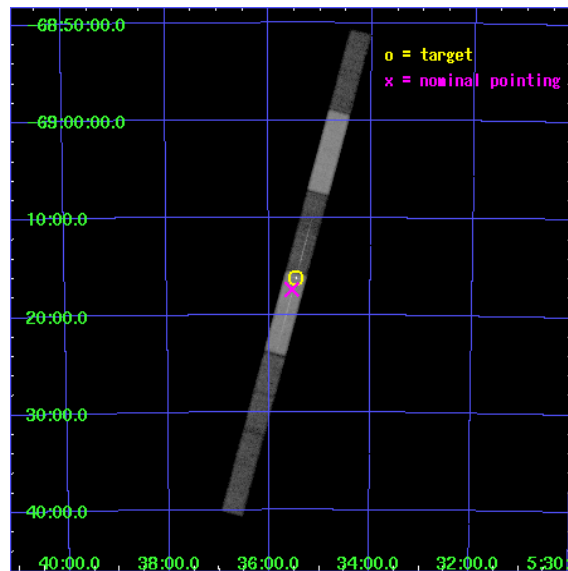
L2 Processing Date : Apr 19 2006

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1 Front

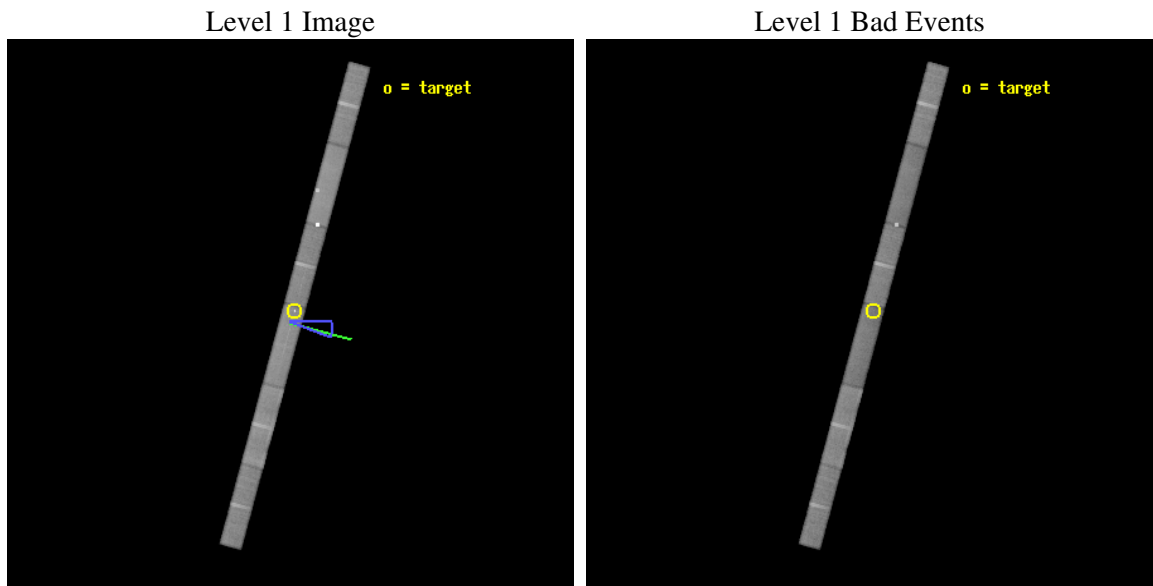
seq_num	500460
obs_id	5362
title	Spatially resolved grating spectrometry of the newborn supernova remnant SNR1987A
observer	Dr. Richard McCray
object	SNR1987A
dtcycle	0
cycle	P
ra_targ	83.866667
dec_targ	-69.26975
ra_nom	83.88658438312
dec_nom	-69.28959175346
roll_nom	105.17525508892
revision	2
ontime	70182.0
liveltime	67415.277030662
ontime4	70182.0
ontime5	70182.0
ontime6	70182.0
ontime7	70182.0
ontime8	70182.0
ontime9	70182.0
l2events	236214



2 OBI

2.1 OBI

2.1.1 Images



2.1.2 Bias

Chip 4

Chip 5

Chip 6



Chip 7

Chip 8

Chip 9



2.1.3 Parameters

obi_num	0
ascdsver	7.6.7.1
caldbver	3.2.1
date	2006-04-19T05:11:15
revision	2

sched_exp_time	70000.000000
ontime	71359.309790045
ontime4	71359.309790045
ontime5	71359.309790045
ontime6	71360.350800127
ontime7	71359.309790045
ontime8	71360.350800127
ontime9	71360.350800127
l1events	1156629

2.1.4 Events

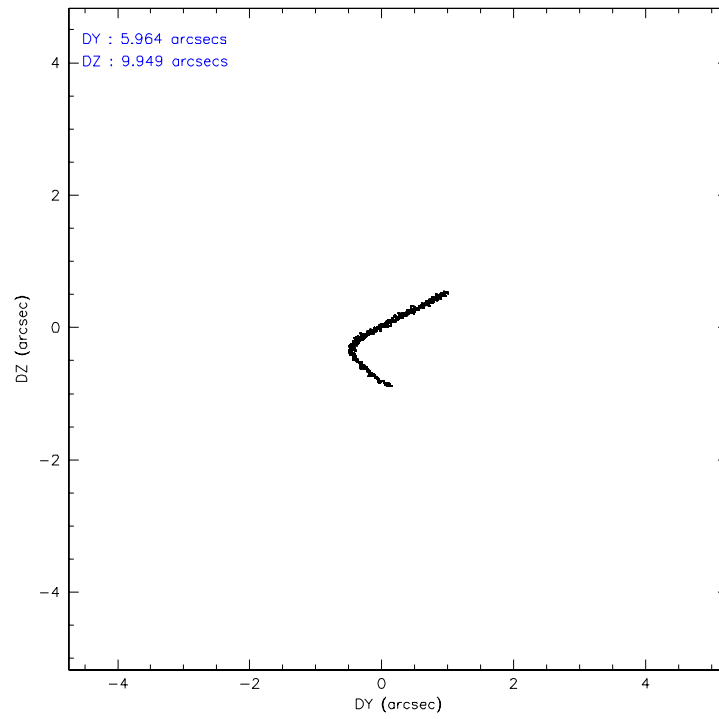
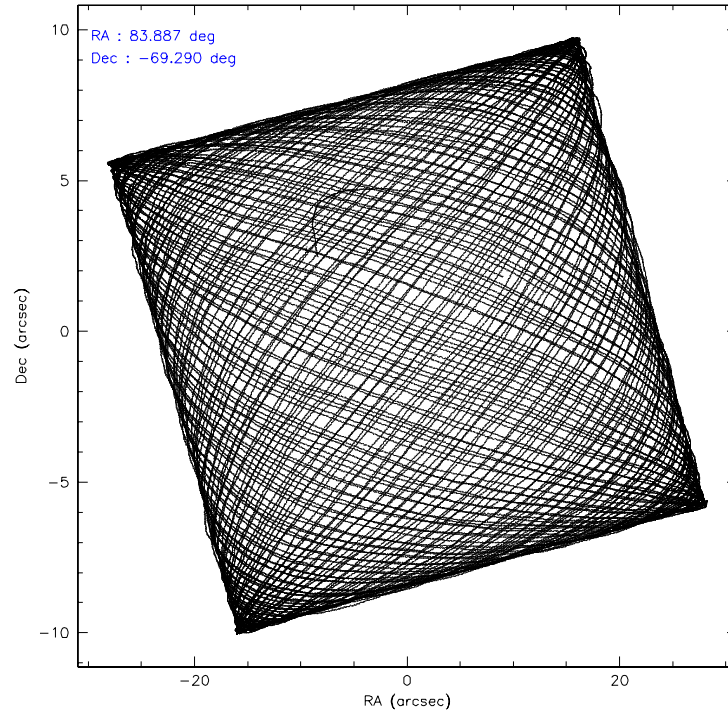
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
level 1 events	183297	240060	166517	195740	213791	157224
rejected events	162943	122935	145955	111284	171200	138499
rejected %	88%	51%	87%	56%	80%	88%

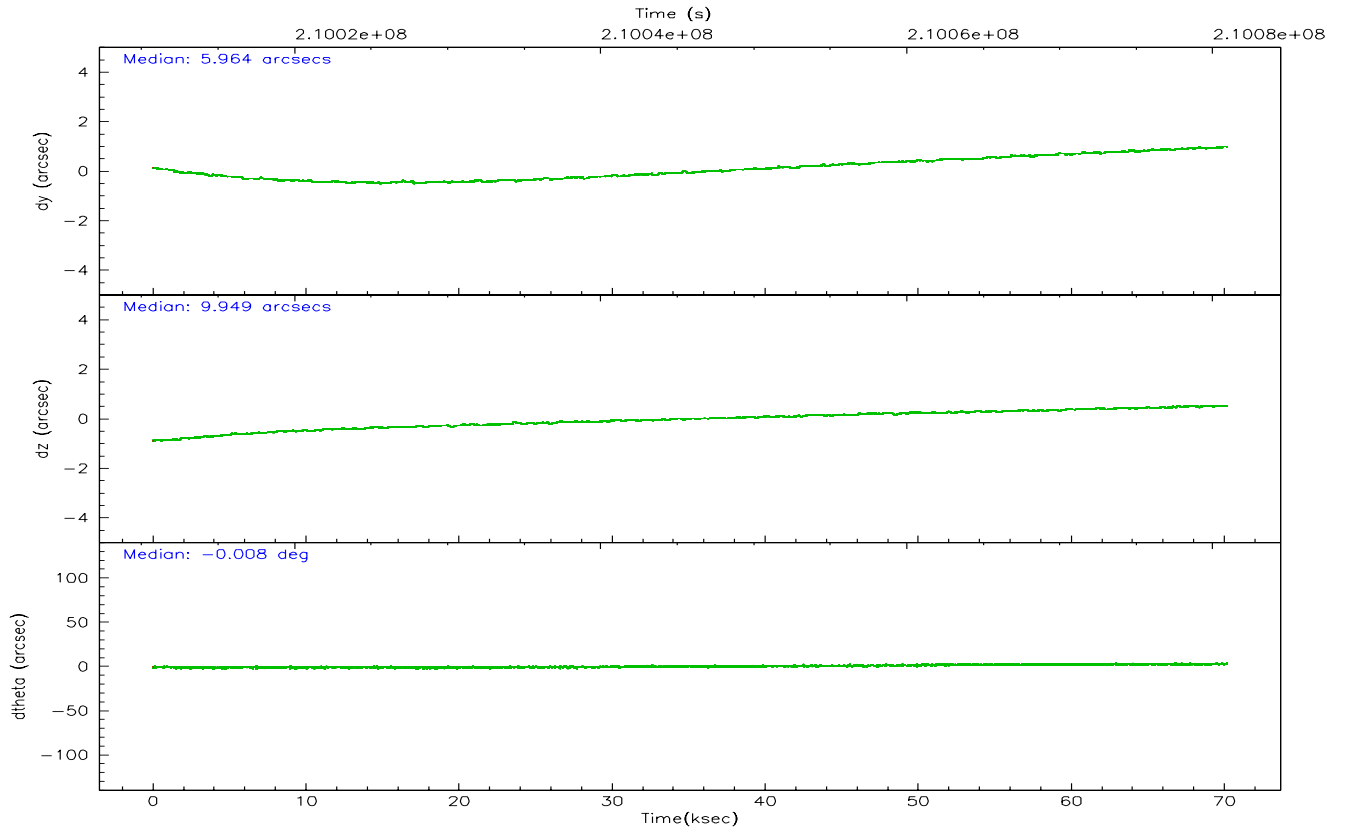
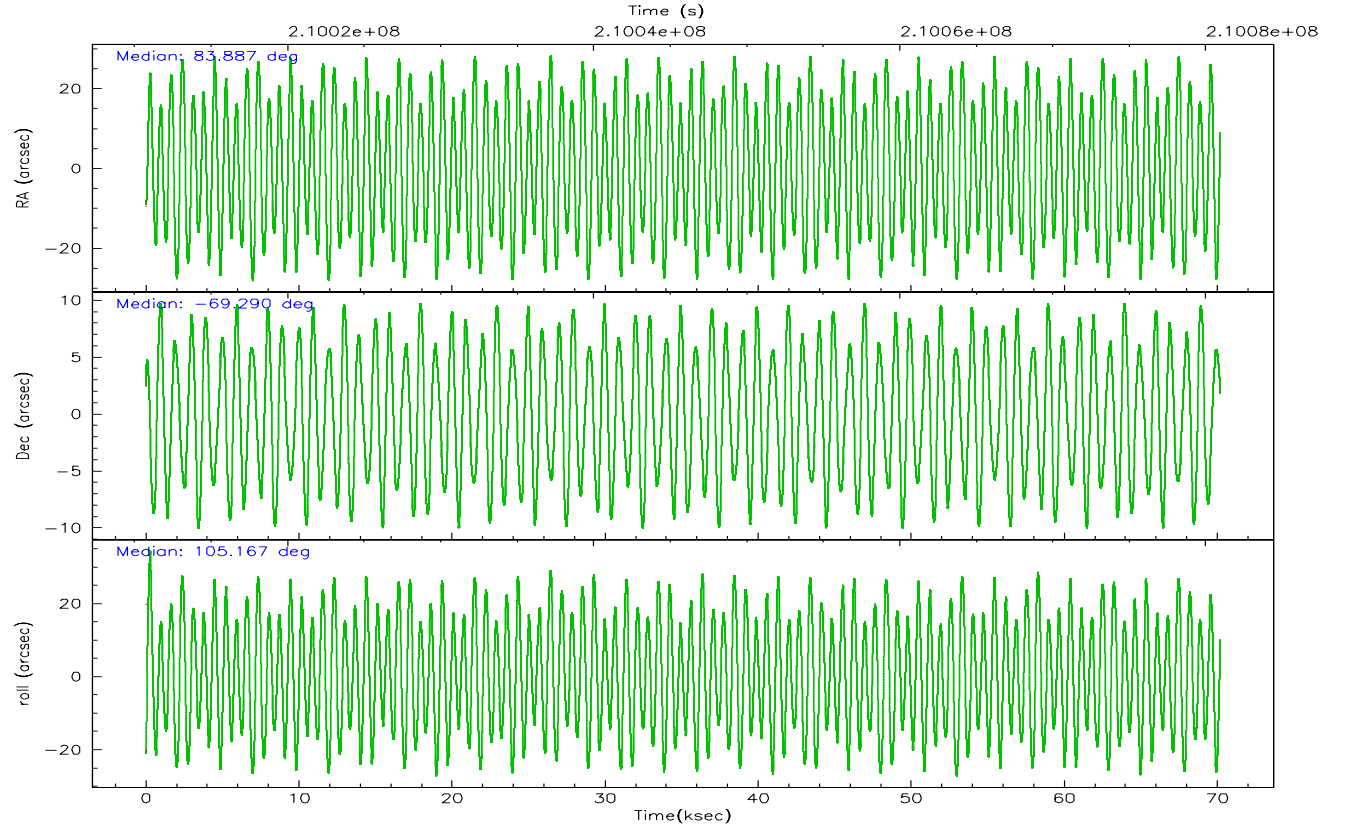
	ccd 4	ccd 5	ccd 6	ccd 7	ccd 8	ccd 9
grade 0 events	7750	15422	8441	7936	12396	6992
	4%	6%	5%	4%	5%	4%
grade 1 events	62	1102	53	145	89	48
	0%	0%	0%	0%	0%	0%
grade 2 events	4186	27911	3548	19583	8920	3383
	2%	11%	2%	10%	4%	2%
grade 3 events	2882	8574	2749	7720	5053	2664
	1%	3%	1%	3%	2%	1%
grade 4 events	2702	8429	2714	7543	5000	2562
	1%	3%	1%	3%	2%	1%
grade 5 events	5522	17345	6009	15121	7861	6166
	3%	7%	3%	7%	3%	3%
grade 6 events	3181	58989	3424	42979	12089	3401
	1%	24%	2%	21%	5%	2%
grade 7 events	157012	102288	139579	94713	162383	132008
	85%	42%	83%	48%	75%	83%

2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	6	6
Detector	ACIS-456789	ACIS-456789	Obspar file type	PREDICTED	ACTUAL
Grating	LETG	LETG	Obspar update status	NONE	UPDATED
Data mode	FAINT	FAINT	On-chip summing requested	N	N
Observation mode	POINTING	POINTING	Subarray requested	CUSTOM	1/4
Pointing RA	83.941966	83.88658438312025	Subarray start row	49	49
Pointing Dec	-69.308481	-69.2895917534599	Subarray row count	256	256
Pointing Roll	105.070441	105.1752550889237	Alternating exposures requested	N	N
Roll angle	100.000000	100.000000	Primary exposure time	0.000000	1
Roll tolerance	10.000000	10.000000			
Roll constraint allows 180D rotation	N	N			
SIM focus pos (mm)	-0.684267	-0.6828225247311905			
SIM defocus (mm)	0	0.001444936568705701			
SIM translation stage pos (mm)	-182.132523	-182.1344861297048			
SIM translation stage offset (mm)	-8	-7.998036453302973			
Observation start time	210010940.184000	210009580.76037			
Observation start date	2004-08-27T16:21:16	2004-08-27T15:59:40			
Observation end time	210080940.184000	210081839.16359			
Observation end date	2004-08-28T11:47:56	2004-08-28T12:03:59			
Read mode	TIMED	TIMED			

2.3 Aspect



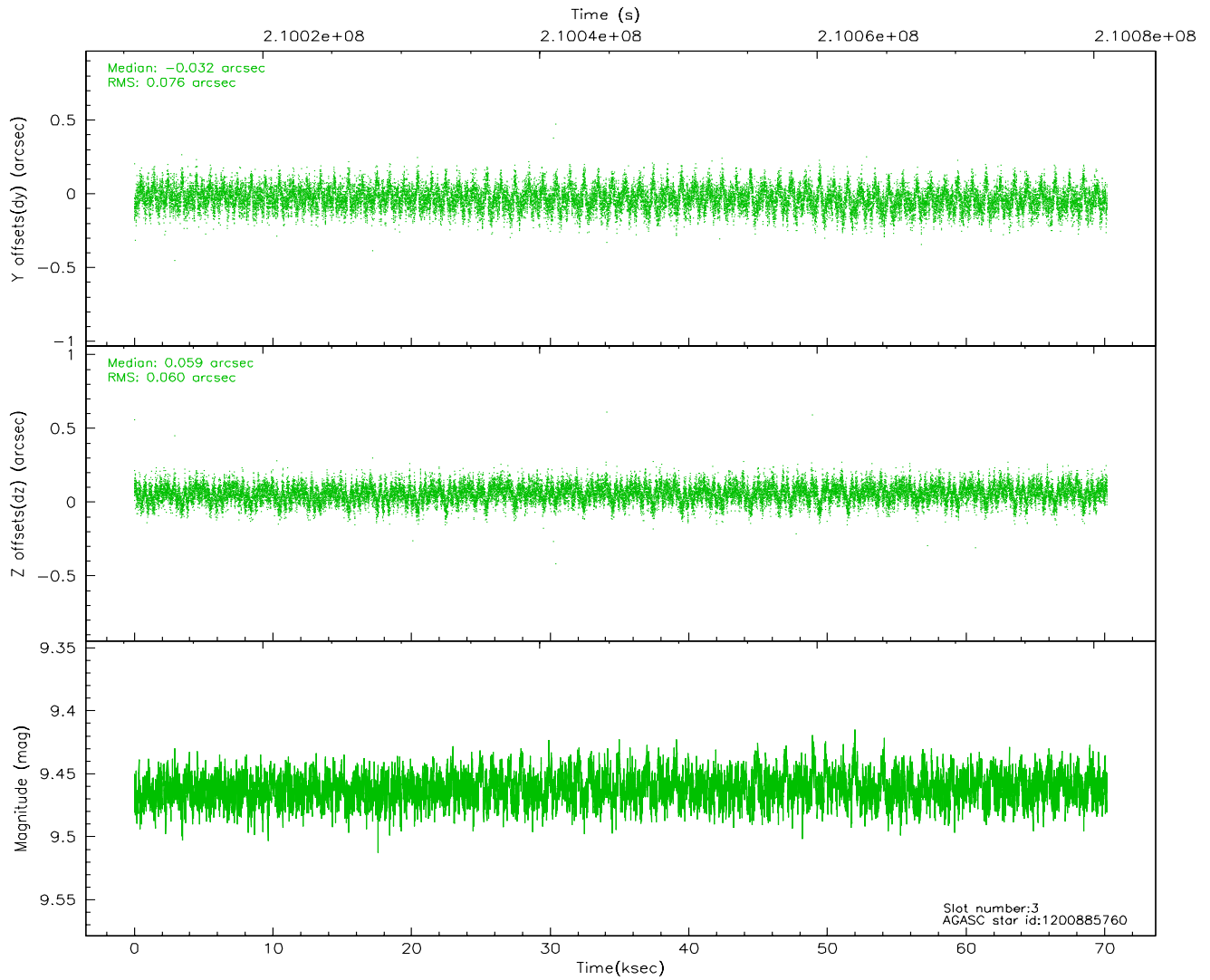
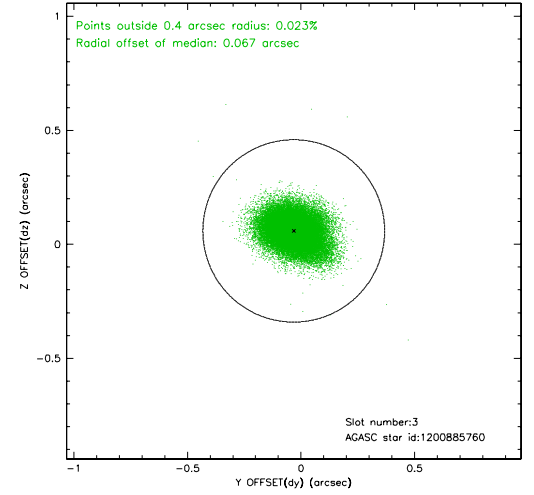
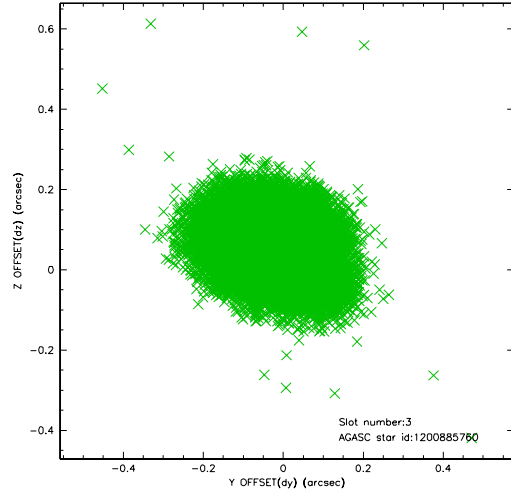


Slot Statistics

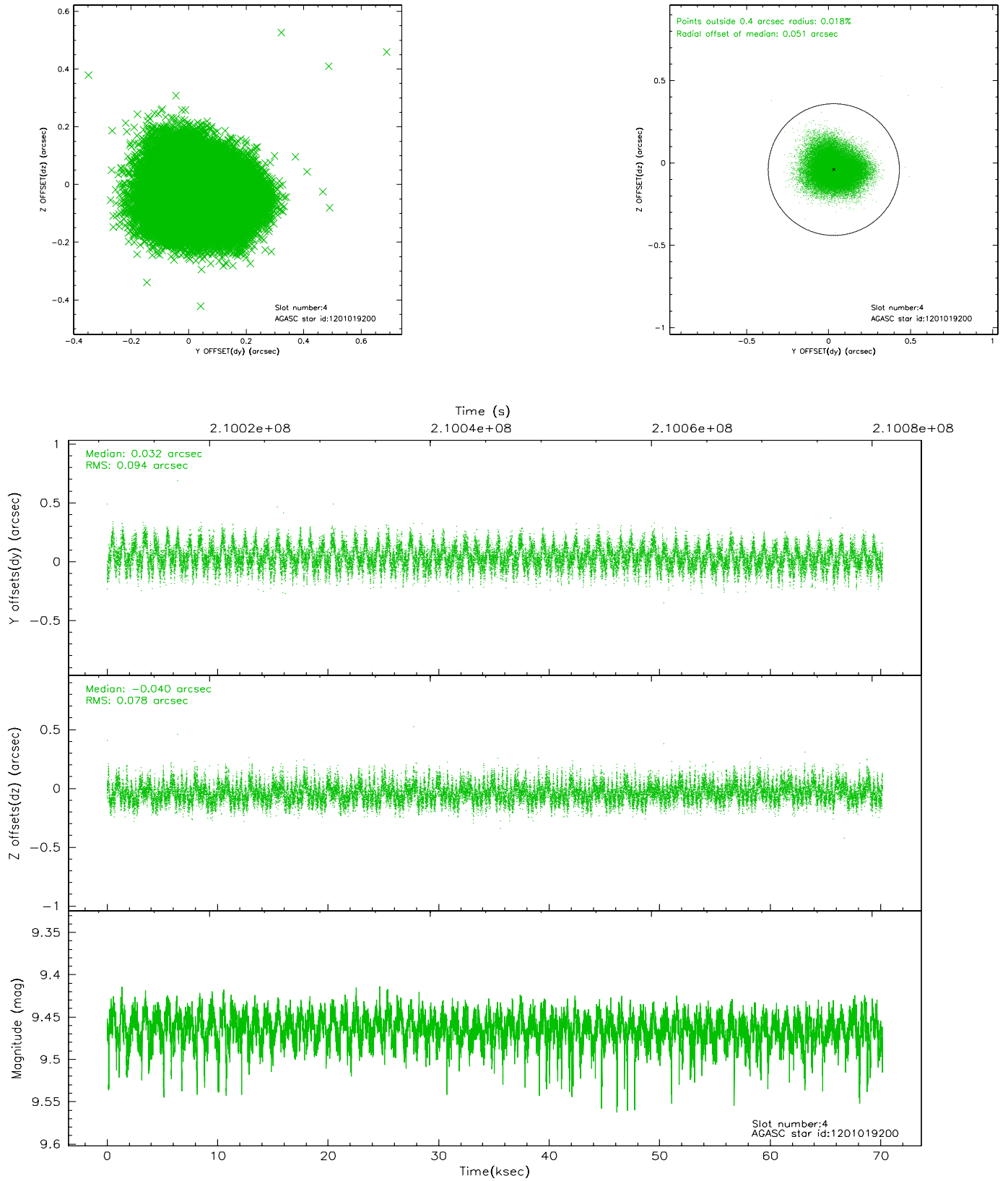
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-S-1	7.18	17119	0.069	0.061	0.016	0.039	0.000000	0.000000	937.96	-1891.45
1	FID	ACIS-S-2	7.09	17118	-0.105	-0.110	0.012	0.023	0.000000	0.000000	-758.14	-1896.19
2	FID	ACIS-S-5	7.22	17118	0.014	0.054	0.013	0.026	0.000000	0.000000	-1811.28	6.03
3	GUIDE	1200885760	9.46	34205	-0.032	0.059	0.102	0.171	83.723637	-68.777667	1918.90	-221.54
4	GUIDE	1201019200	9.46	34209	0.032	-0.040	0.132	0.205	84.213591	-68.777384	1753.89	-838.38
5	GUIDE	1201406184	7.94	34237	-0.057	-0.058	0.066	0.109	82.503234	-69.975517	-1877.86	2342.04
6	GUIDE	1201410616	9.35	34212	0.112	-0.172	0.128	0.202	82.516808	-69.784406	-1213.42	2162.52
7	GUIDE	1201017424	10.20	34199	-0.069	0.219	0.177	0.295	85.854985	-69.248506	-462.17	-2401.68

2.4 Star Slots

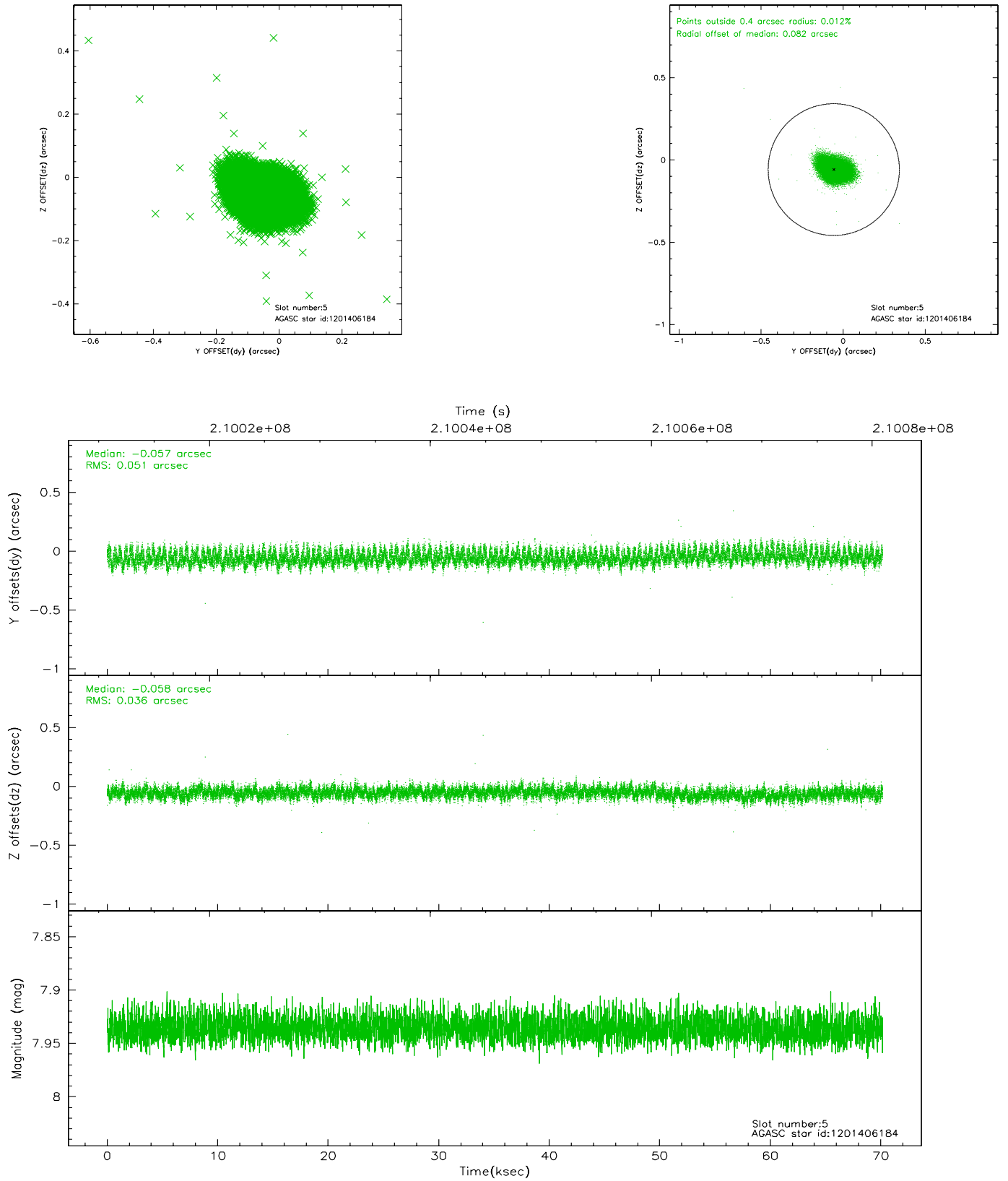
2.4.1 Slot 3



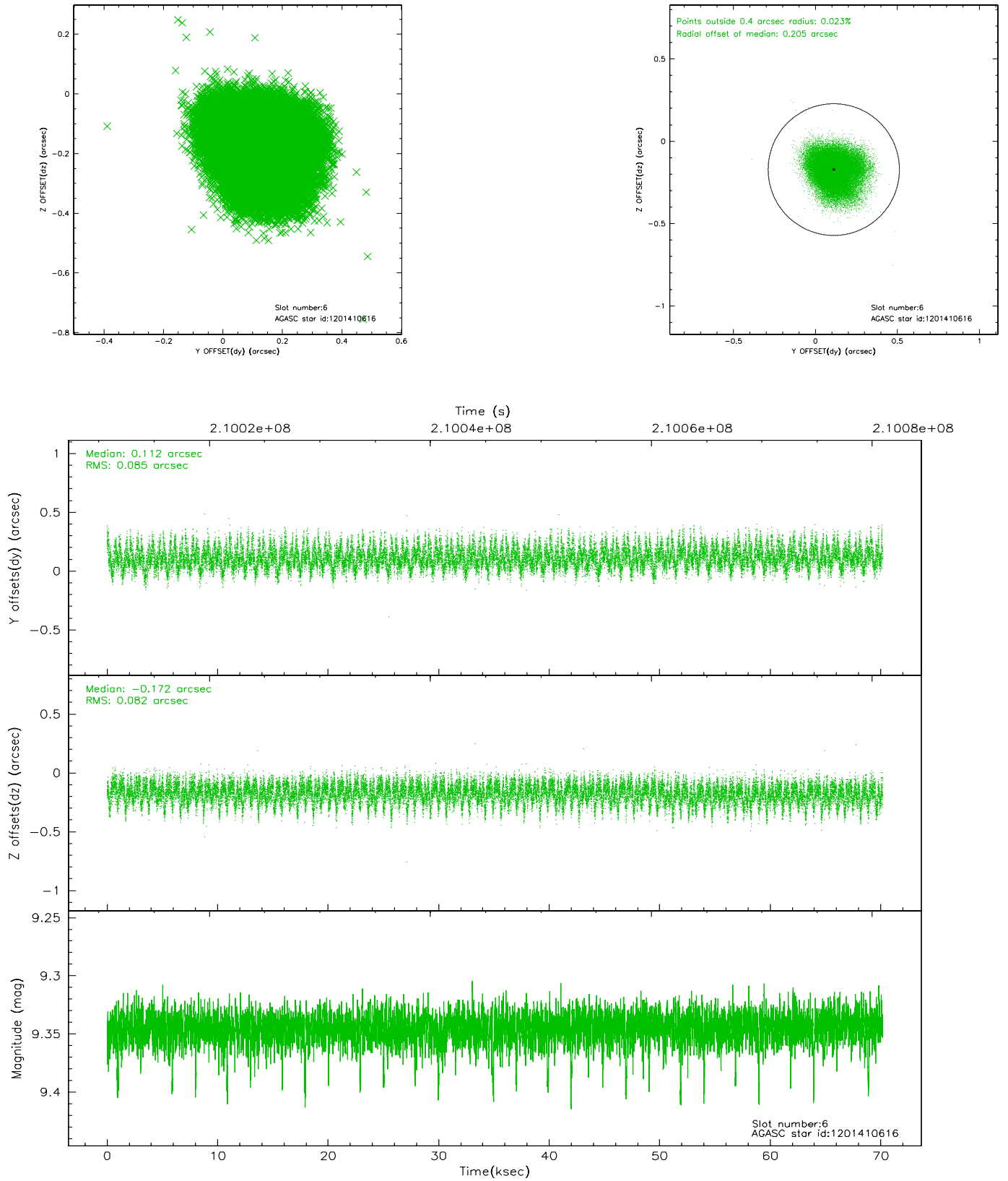
2.4.2 Slot 4



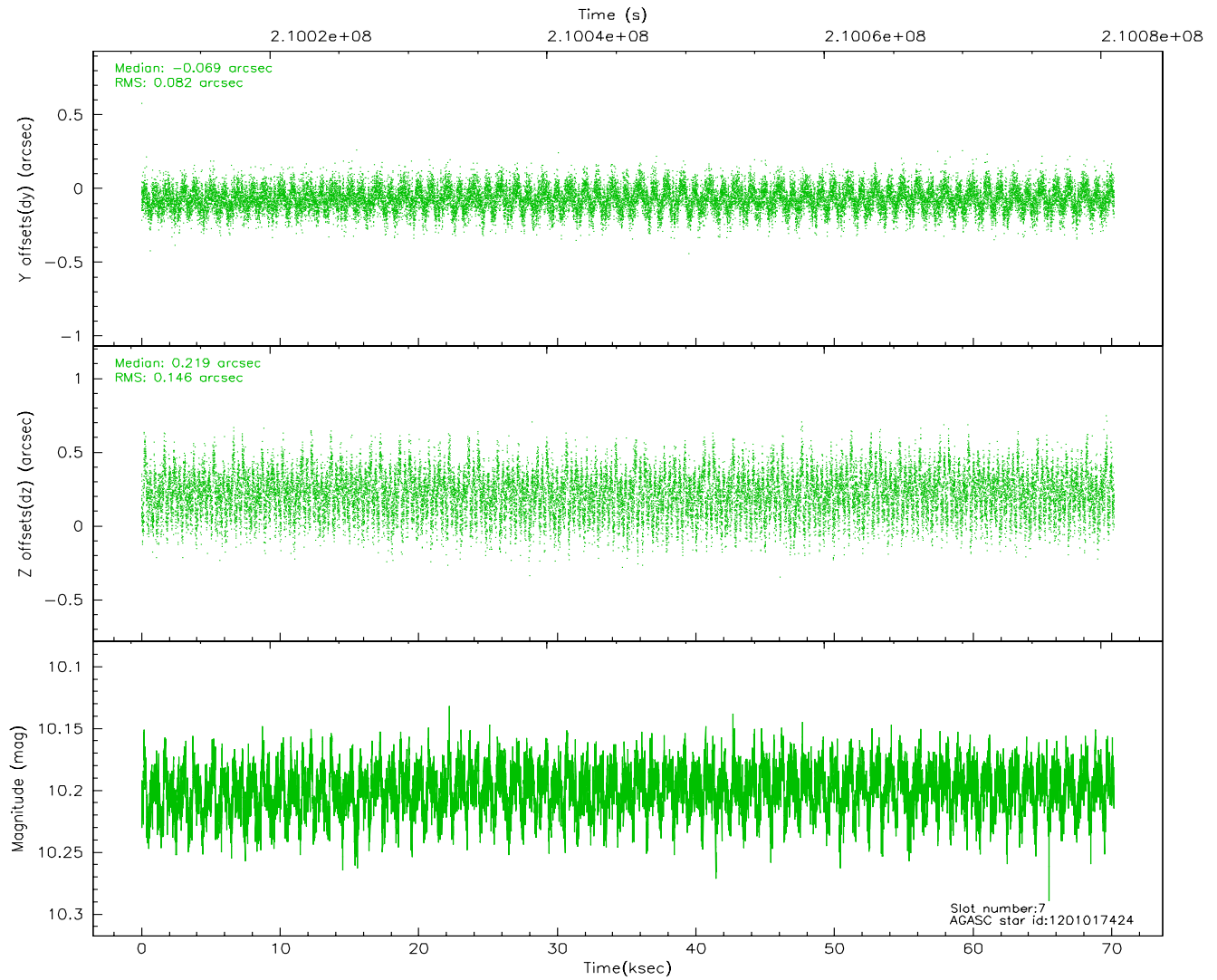
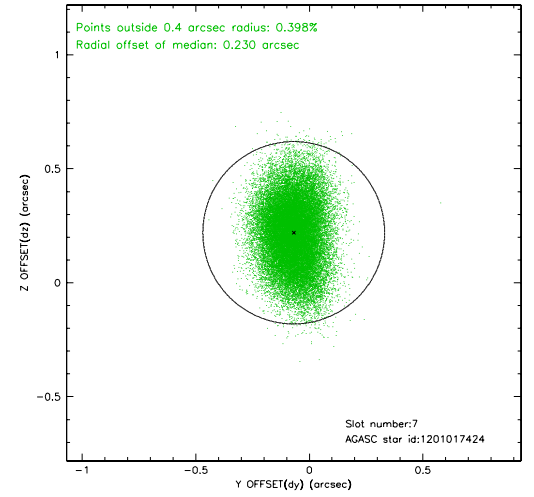
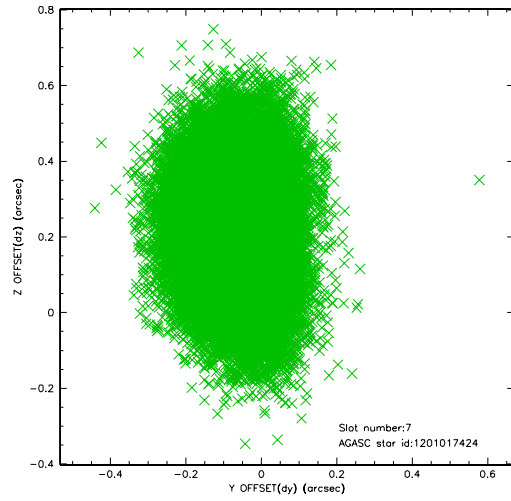
2.4.3 Slot 5



2.4.4 Slot 6

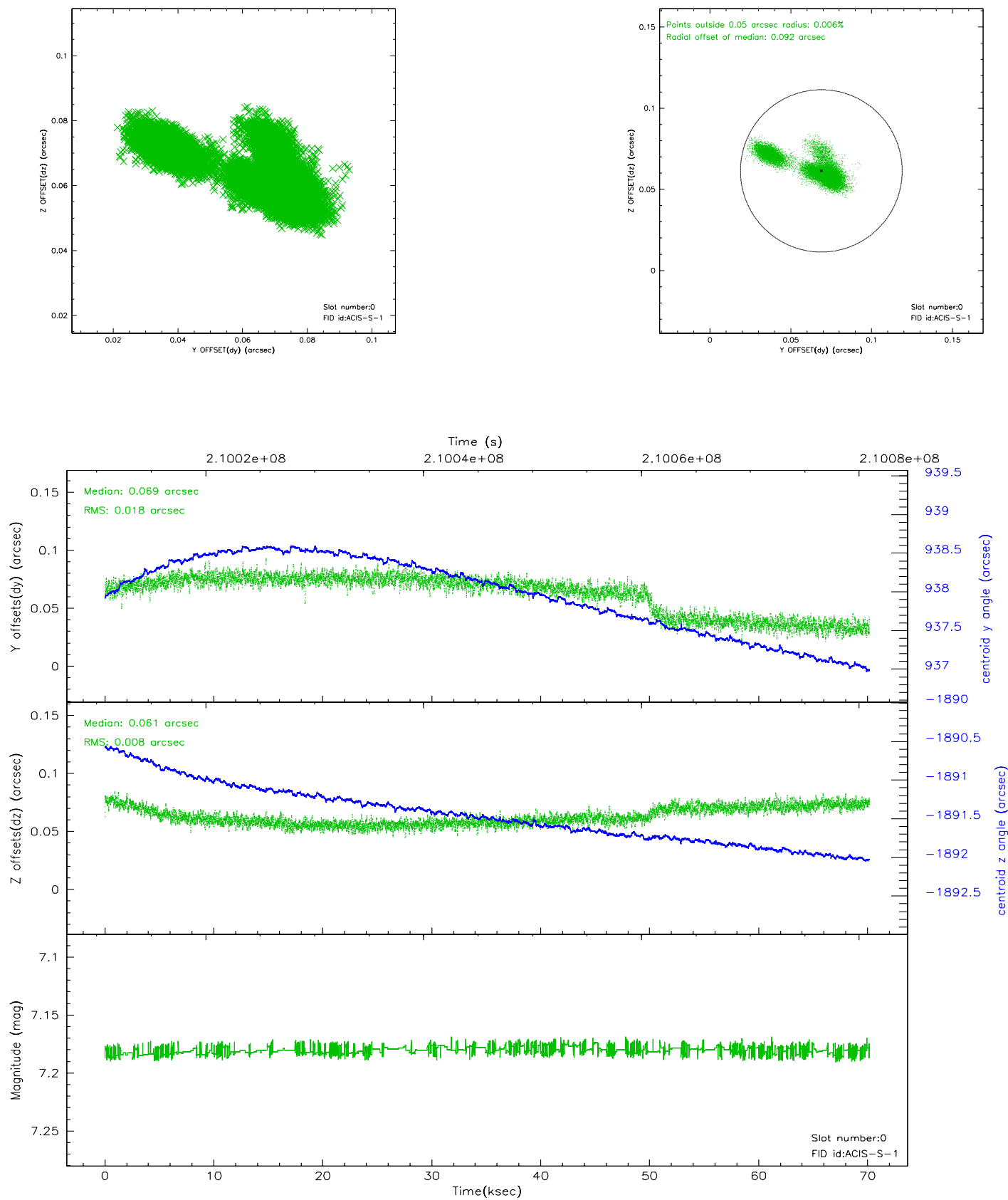


2.4.5 Slot 7

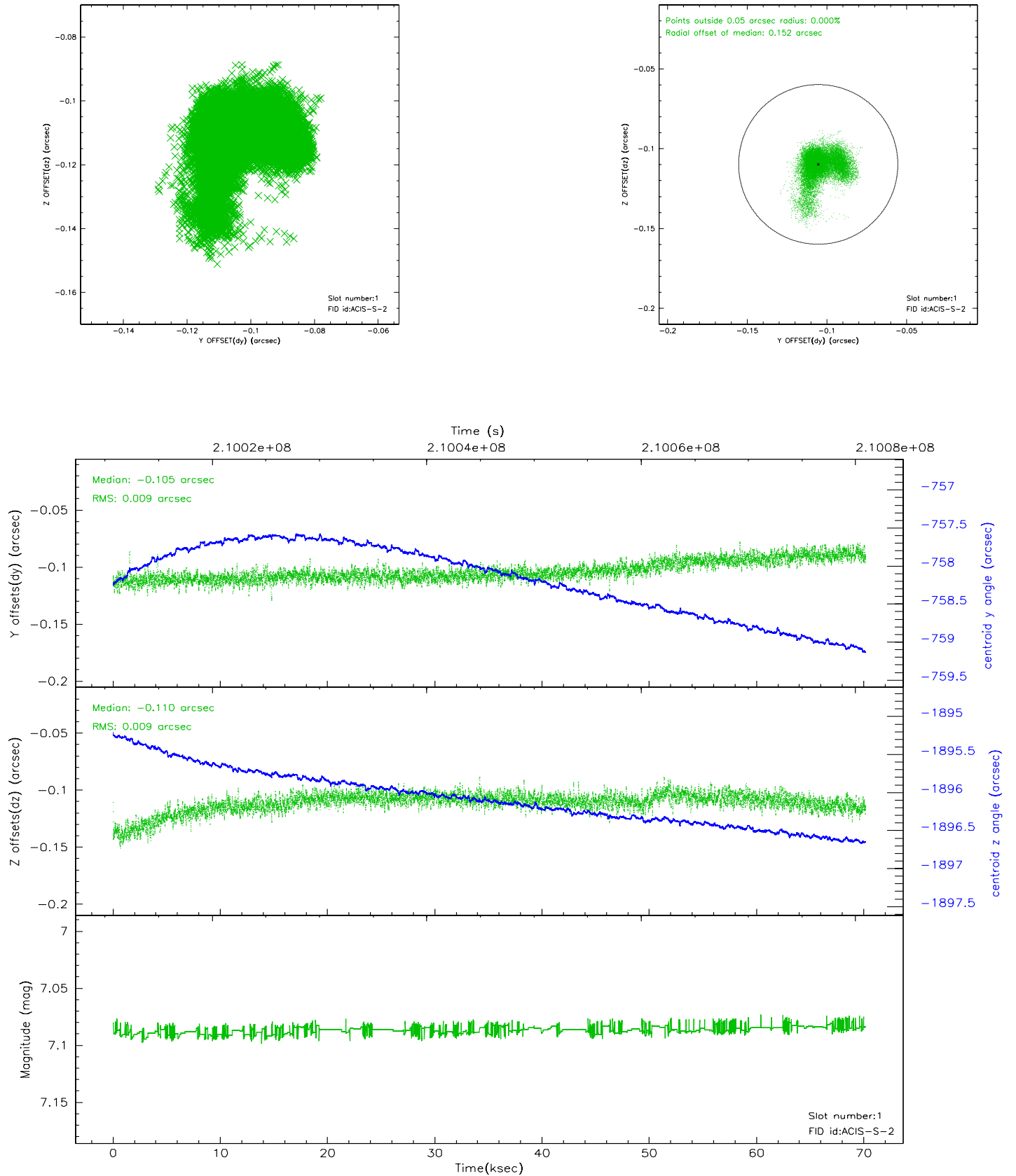


2.5 FID Slots

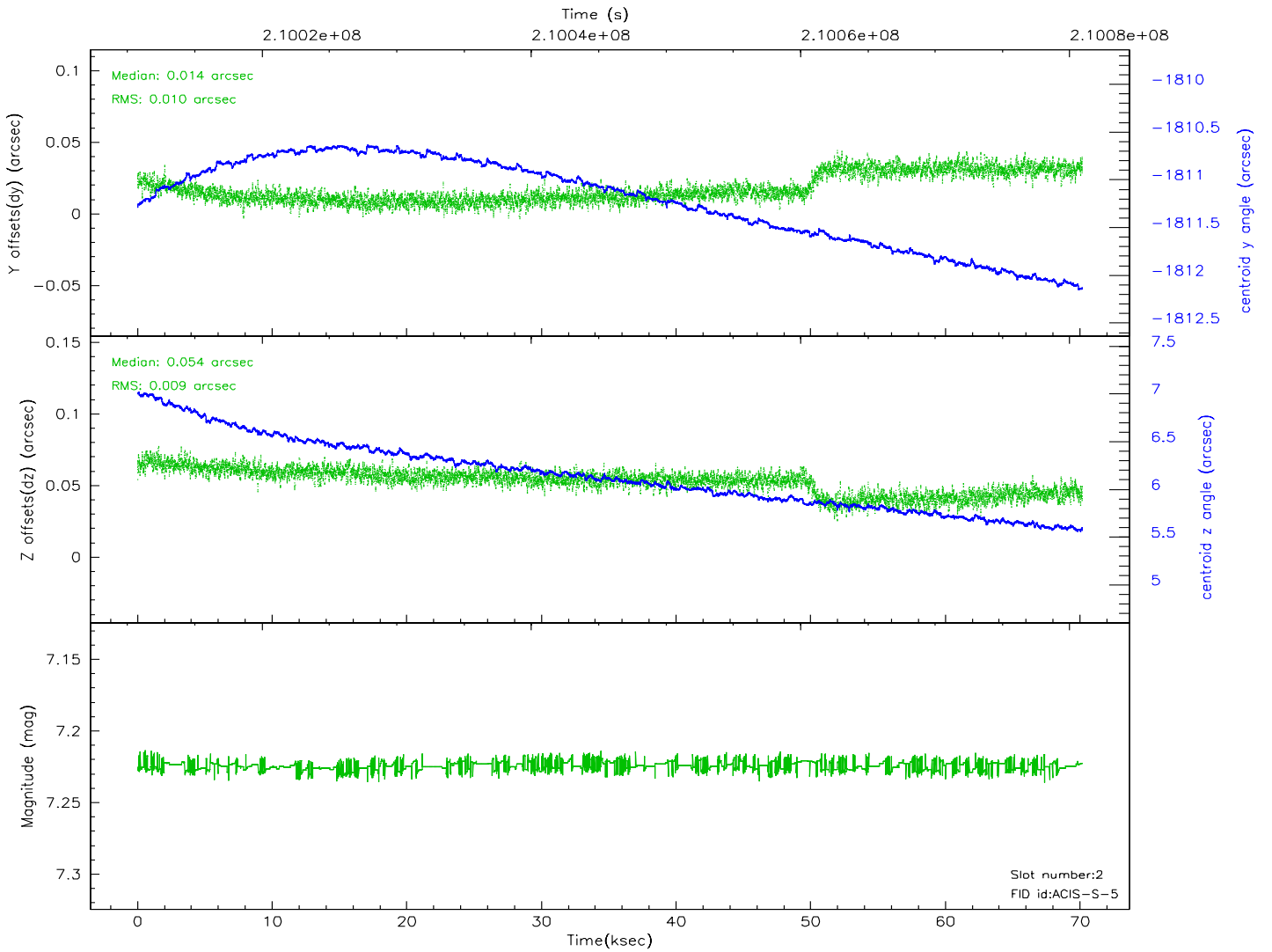
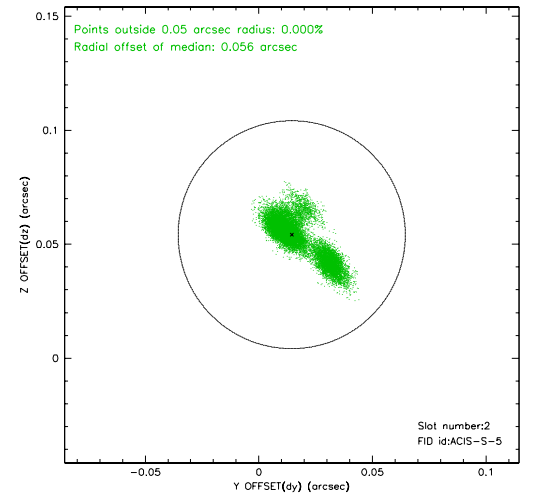
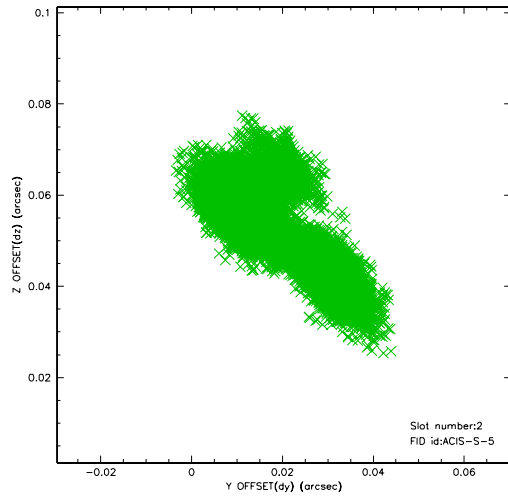
2.5.1 Slot 0



2.5.2 Slot 1



2.5.3 Slot 2

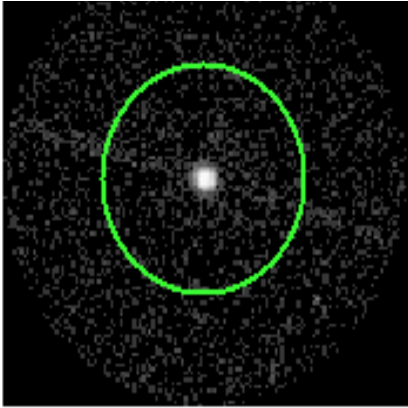


3 Gratings

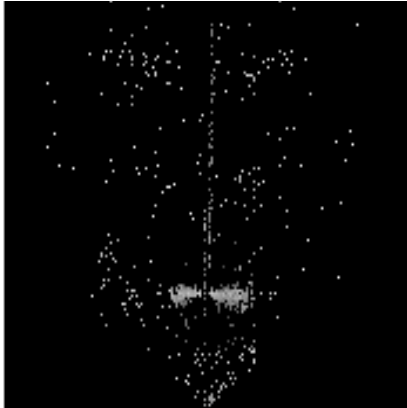
3.1 LETG Arm



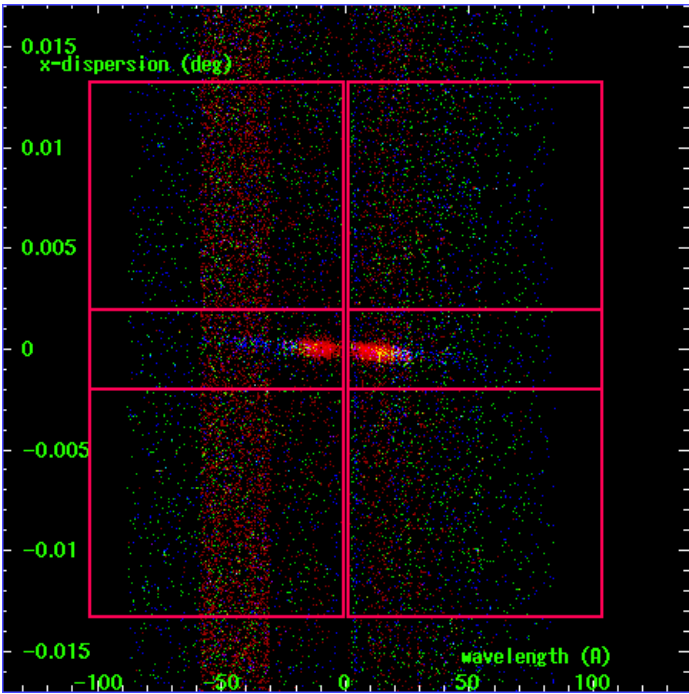
LETG Order Sort 123



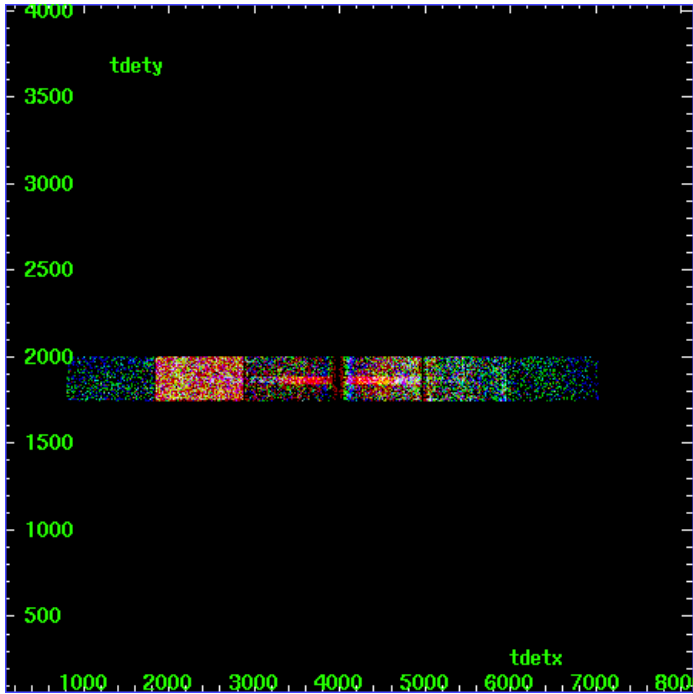
LETG Zero Order



LETG Order Sort ALL

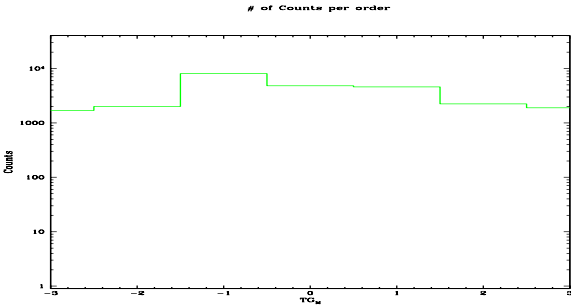


Spot Image LETG

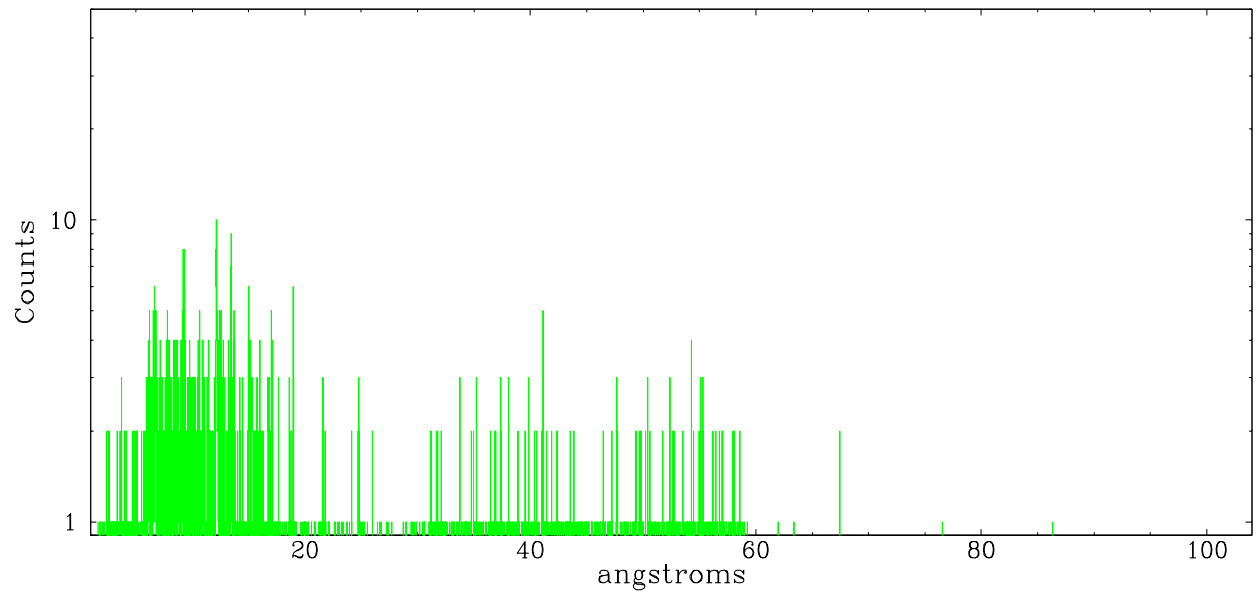


Full Detector LETG

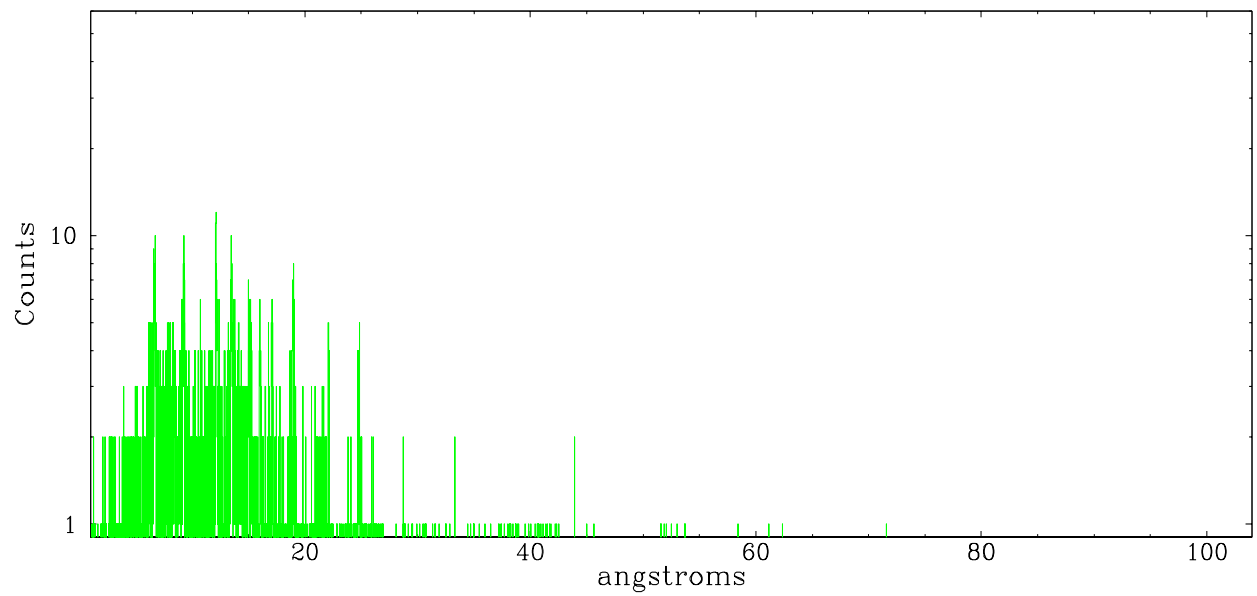
	order -3	order -2	order -1	order 0	order 1	order 2	order 3
Events	1696	1994	8019	4813	4599	2229	1890



leg order -1



leg order $+1$



A Summary

A.1 Status

V&V Scientist	Joy Nichols
V&V Date (YYYY-MM-DD)	2006.04.21
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	70.182

A.2 Comments

Roll constraint met.